

This listing of claims will replace all prior versions of the claims in this application:

Listing of Claims:

Claims 1 – 8 (Canceled)

Claim 9. (Currently Amended) A The method of generating tooth tissue of claim 5 comprising, applying tooth germ cells onto a biodegradable polymer scaffold and allowing the tooth germ cells to develop into a tooth for implantation, wherein the tooth germ cells comprise cells from an enamel organ and a pulp organ.

Claim 10. (Previously Presented) The method of generating tooth tissue of claim 9, wherein the tooth germ cells are mammalian.

Claim 11. (Previously Presented) The method of generating tooth tissue of claim 9, wherein the tooth germ cells are porcine.

Claim 12. (Currently Amended) A The method of generating tooth tissue of claim 5 comprising, applying tooth germ cells onto a biodegradable polymer scaffold and allowing the tooth germ cells to develop into a tooth for implantation, wherein the tooth germ cells comprise cells dissociated from an enamel organ, a pulp organ, and from tissue cultured cells derived from tooth tissues.

Claim 13. (Currently Amended) A The method of generating tooth tissue of claim 5 comprising, applying tooth germ cells onto a biodegradable polymer scaffold and allowing the tooth germ cells to develop into a tooth for implantation, wherein the scaffold is implanted into an omentum of a host animal.

Claim 14. (Previously Presented) The method of generating tooth tissue of claim 13, wherein the scaffold is implanted into the omentum of a rat.

Claims 15 – 22 (Canceled)

Claim 23. (Currently Amended) A The method of generating tooth tissue of claim 19, comprising, forming a biodegradable polymer scaffold, applying tooth germ cells onto the biodegradable polymer scaffold, and implanting the scaffold into a host animal, wherein the tooth germ cells comprise cells dissociated from an enamel organ and a pulp organ.

Claim 24. (Previously Presented) The method of generating tooth tissue of claim 23, wherein the tooth germ cells are mammalian.

Claim 25. (Previously Presented) The method of generating tooth tissue of claim 23, wherein the tooth germ cells are porcine.

Claim 26. (Currently Amended) The method of generating tooth tissue of claim 23 19, wherein the tooth germ cells comprise cells dissociated from an enamel organ, a pulp organ, and from tissue cultured cells derived from tooth tissues.

Claim 27. (Currently Amended) The method of generating tooth tissue of claim 23 19, wherein the scaffold is implanted into an omentum of a host animal.

Claim 28. (Previously Presented) The method of generating tooth tissue of claim 27, wherein the scaffold is implanted into the omentum of a rat.

Claim 29 – 32 (Canceled)

Claim 33. (Previously Presented) A method of generating tooth tissue comprising preparing a tooth mold in the shape of a human tooth, forming a biodegradable polymer scaffold in the tooth mold, applying tooth germ cells onto the biodegradable polymer scaffold, and implanting the scaffold into an omentum of a host animal.

Claim 34. (New) The method of generating tooth tissue of claim 33, wherein the tooth germ cells comprise cells from an enamel organ and a pulp organ.

Claim 35. (New) The method of generating tooth tissue of claim 33, wherein the tooth germ cells are mammalian.

Claim 36. (New) The method of generating tooth tissue of claim 33, wherein the tooth germ cells are porcine.

Claim 37. (New) The method of generating tooth tissue of claim 33, wherein the tooth germ cells comprise cells dissociated from an enamel organ, a pulp organ, and from tissue cultured cells derived from tooth tissues.

Claim 38. (New) The method of generating tooth tissue of claim 33, wherein the scaffold is implanted into an omentum of a host animal.

Claim 39. (New) The method of generating tooth tissue of claim 33, wherein the scaffold is implanted into the omentum of a rat.

Claim 40. (New) The method of generating tooth tissue of claim 33, wherein the tooth germ cells are applied to the biodegradable polymer scaffold with between about 20 to 50 million cells per square inch of scaffold.

Claim 41. (New) The method of generating tooth tissue of claim 33, wherein the biodegradable polymer scaffold is selected from the group consisting of poly(lactide), poly(glycolide), and poly(L-lactide-co-glycolide).

Claim 42. (New) The method of generating tooth tissue of claim 33, wherein the tooth germ cells are allowed to attach to the scaffold for at least one hour prior to implanting.

Claim 43. (New) The method of generating tooth tissue of claim 33, wherein the biodegradable polymer scaffold is coated in collagen prior to applying.

Claim 44. (New) The method of generating tooth tissue of claim 9, wherein the tooth germ cells are mammalian.

Claim 45. (New) The method of generating tooth tissue of claim 9, wherein the tooth germ cells are porcine.

Claim 46. (New) The method of generating tooth tissue of claim 9, wherein the tooth germ cells comprise cells dissociated from an enamel organ, a pulp organ, and from tissue cultured cells derived from tooth tissues.

Claim 47. (New) The method of generating tooth tissue of claim 9, wherein the biodegradable polymer scaffold is in the shape of a human tooth.

Claim 48. (New) The method of generating tooth tissue of claim 9, wherein the biodegradable polymer scaffold is in the shape of a tooth.

Claim 49. (New) The method of generating tooth tissue of claim 9, wherein the scaffold is implanted into an omentum of a host animal.

Claim 50. (New) The method of generating tooth tissue of claim 9, wherein the scaffold is implanted into the omentum of a rat.

Claim 51. (New) The method of generating tooth tissue of claim 9, wherein the tooth germ cells are applied to the biodegradable polymer scaffold with between about 20 to 50 million cells per square inch of scaffold.

Claim 52. (New) The method of generating tooth tissue of claim 9, wherein the biodegradable polymer scaffold is selected from the group consisting of poly(lactide), poly(glycolide), and poly(L-lactide-co-glycolide).

Claim 53. (New) The method of generating tooth tissue of claim 9, wherein the tooth germ cells are allowed to attach to the scaffold for at least one hour prior to implanting.

Claim 54. (New) The method of generating tooth tissue of claim 9, wherein the biodegradable polymer scaffold is coated in collagen prior to applying.

Claim 55. (New) The method of generating tooth tissue of claim 12, further comprising forming a tooth mold, wherein the biodegradable polymer scaffold is formed in the tooth mold.

Claim 56. (New) The method of generating tooth tissue of claim 12, wherein the biodegradable polymer scaffold is in the shape of a tooth.

Claim 57. (New) The method of generating tooth tissue of claim 12, wherein the biodegradable polymer scaffold is in the shape of a human tooth.

Claim 58. (New) The method of generating tooth tissue of claim 12, wherein the tooth germ cells are mammalian or porcine.

Claim 59. (New) The method of generating tooth tissue of claim 12, wherein the scaffold is implanted into an omentum of a host animal.

Claim 60. (New) The method of generating tooth tissue of claim 12, wherein the scaffold is implanted into the omentum of a rat.

Claim 61. (New) The method of generating tooth tissue of claim 12, wherein the tooth germ cells are applied to the biodegradable polymer scaffold with between about 20 to 50 million cells per square inch of scaffold.

Claim 62. (New) The method of generating tooth tissue of claim 12, wherein the biodegradable polymer scaffold is selected from the group consisting of poly(lactide), poly(glycolide), and poly(L-lactide-co-glycolide).

Claim 63. (New) The method of generating tooth tissue of claim 12, wherein the tooth germ cells are allowed to attach to the scaffold for at least one hour prior to implanting.

Claim 64. (New) The method of generating tooth tissue of claim 12, wherein the biodegradable polymer scaffold is coated in collagen prior to applying.

Claim 65. (New) The method of generating tooth tissue of claim 13, further comprising forming a tooth mold, wherein the biodegradable polymer scaffold is formed in the tooth mold.

Claim 66. (New) The method of generating tooth tissue of claim 13, wherein the biodegradable polymer scaffold is in the shape of a tooth.

Claim 67. (New) The method of generating tooth tissue of claim 13, wherein the biodegradable polymer scaffold is in the shape of a human tooth.

Claim 68. (New) The method of generating tooth tissue of claim 13, wherein the tooth germ cells comprise cells from an enamel organ and a pulp organ.

Claim 69. (New) The method of generating tooth tissue of claim 13, wherein the tooth germ cells are mammalian.

Claim 70. (New) The method of generating tooth tissue of claim 13, wherein the tooth germ cells are porcine.

Claim 71. (New) The method of generating tooth tissue of claim 13, wherein the tooth germ cells comprise cells dissociated from an enamel organ, a pulp organ, and from tissue cultured cells derived from tooth tissues.

Claim 72. (New) The method of generating tooth tissue of claim 13, wherein the scaffold is implanted into the omentum of a rat.

Claim 73. (New) The method of generating tooth tissue of claim 13, wherein the tooth germ cells are applied to the biodegradable polymer scaffold with between about 20 to 50 million cells per square inch of scaffold.

Claim 74. (New) The method of generating tooth tissue of claim 13, wherein the biodegradable polymer scaffold is selected from the group consisting of poly(lactide), poly(glycolide), and poly(L-lactide-co-glycolide).

Claim 75. (New) The method of generating tooth tissue of claim 13, wherein the tooth germ cells are allowed to attach to the scaffold for at least one hour prior to implanting.

Claim 76. (New) The method of generating tooth tissue of claim 13, wherein the biodegradable polymer scaffold is coated in collagen prior to applying.

Claim 77. (New) The method of generating tooth tissue of claim 23, further comprising preparing a tooth mold wherein the biodegradable polymer scaffold is formed in the tooth mold.

Claim 78. (New) The method of generating tooth tissue of claim 23, wherein the biodegradable polymer scaffold is in the shape of a tooth.

Claim 79. (New) The method of generating tooth tissue of claim 23, wherein the biodegradable polymer scaffold is in the shape of a human tooth.